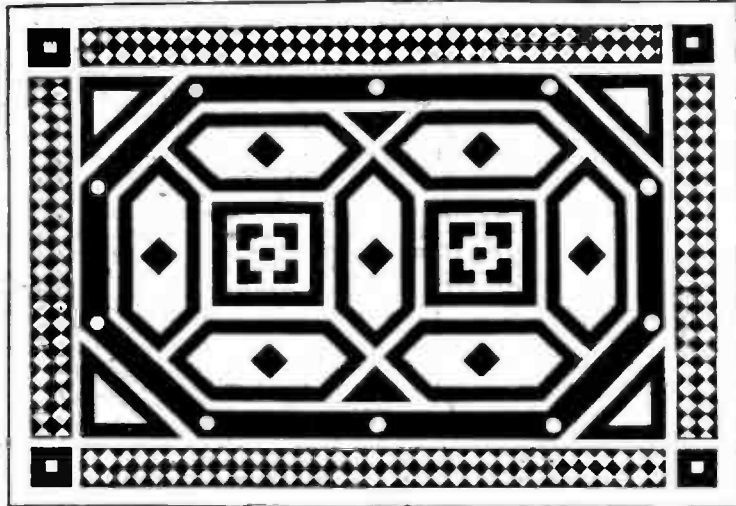


## TILE PAVEMENT: CAPRAROLA.



TILE PAVEMENT FROM CAPRAROLA.

THE palace at Caprarola possesses a great variety of ornamental pavements in tiles; the one in the chapel (in which marble-pavement are introduced) is especially handsome. The one here engraved is a simple and useful example from an apartment, on the "piano nobile." It is in red and white tiles. These are mostly square, 5½ inches diameter; circular and other forms are sparingly employed, and then always adjusted with nicety and care. The dimensions of this pavement are 27 feet by 19 feet.

## ON THE HISTORY OF THE POINTED ARCH.

As I said before, it is needless to look in those countries where Roman influence was strong for specimens of pointed arches—in decorative art, at least. Like our forefathers some fifty years ago, the Romans believed that the pointed arch was an ugly thing in itself, and never used it when they could help it. In some of their engineering works, however, when they were off their guard, and thinking more of the use of the construction than the effect it was to produce æsthetically, we find them reverting to the native form; as, for instance, in the aqueducts that supplied Constantinople with water. These were commenced under Constantine, indeed, must have been one of the first works undertaken after founding the city, though their completion seems to be due to the Emperor Valens (364 and 378 A.D.). Throughout these constructions generally, in the lowest story, and always in the oldest parts, we find pointed arches used, as in the instance of the aqueduct near Pyrgos, where you see two stories of round arches used over a lower range of pointed ones; or in this other example from the same place where the pointed arch is used throughout, except in the decorative parts of the structure, where the round arch is reverted to, as might be expected.

In speaking of the aqueduct of Valens, in the city, General Androossy remarks,—"That there is an older part of a better construction than the new,—the latter being so carelessly built that it is now falling to ruin; besides, the newer part is not constructed on the same plan as the older, all the arches of which are in the pointed style, while those of the newer part are semi-circular." The lower and older part he ascribes to Valens, or to the years 366 and 368.

In this instance, it is true, the pointed arch is more an engineering than an architectural peculiarity,—but it shows, at least, that it was known and used during the age of which I am now treating.

These specimens are, I trust, sufficient to show that the pointed form of arch was not

unknown at the period of which we are speaking; but even if I had not a single example to adduce, I would have no hesitation in asserting its existence and general use in these countries, from the fact of its being universally used by the Mahometans from the earliest years of their existence to the present hour.

The Arabs, it must be recollected, when they left their deserts to subdue the world, were mere nomadic tribes, who had no cities, no temples, and, indeed, no buildings worthy of the name; they were warriors, not architects, and consequently were obliged to employ the natives of the conquered countries to erect their mosques; yet, with scarcely a single exception, all their edifices are erected with pointed arches.

I have here, for instance, a drawing of the oldest part of the Mosque of Amru, at old Cairo, enlarged from a daguerrotype made by Girault De Prangey, in which the pointed arch is used, not only in the built-up arcades, but also in the smaller windows; yet this portion of the mosque, at least, was erected in the twenty-first year after Hegira, A.D. 643, or only twelve years after the death of the prophet. In speaking of these arches, M. de Prangey says,—"The pointed arch, therefore, appears in the Mosque of Amru certain and indubitable, but, at the same time, only exceptionally—in some five or six arcades; and, perhaps," he adds, "even this may not be the work of the Arabs, if we admit the testimony of Edrisi regarding the pre-existence of a Byzantine church on the spot, of which these may have made a part."

Judging from my own knowledge of the building, I should say they were the work of the Saracens; but whether they were or not, is immaterial to my argument. The Saracens certainly copied the pointed arch from the Byzantines, and whether, then, these are the work of the former or of the latter, is of little consequence; it certainly is of the date quoted, or antecedent to it, which is all that is contended for. Except the mosques of Amru (there are two in Egypt), I do not know of any erections of the Saracens anterior to the end of the century. I have here, however, a specimen of one erected by the Calif Walid, at Jerusalem, in the year 87, or about A.D. 705, in which the pointed arch is used throughout. The great mosque at Damascus is of the same age, and from this period to the present time there is no difficulty. The mosques of Cairo and Bagdad, and generally the buildings of Egypt, Syria, and Mesopotamia afford an uninterrupted series of examples, and all are executed in the pointed arch style; indeed, I scarcely know of a single round arch in any erection of this people in these countries; or if one does appear, it is so singular and exceptional as not to bear upon the argument, for round arches

are found in the Gothic buildings of the fourteenth and fifteenth centuries, but they, too, are so few that no one thinks from their existence of denying the universal prevalence of the pointed style. In Sicily, too, which the Saracens occupied for two centuries preceding 1037 A.D., they used the pointed arch in all the monuments they have left there. I need scarcely refer to the well known examples of la Cuba and la Ziza in support of this assertion.

The exception to the rule, that will occur to every one, is Spain. It is true that pointed arches are found in the baths at Gerona, at Barcelona, and other places in the north of Spain, whose date is tolerably well ascertained to be of the ninth or tenth centuries; but, as a general rule, the Moors used the round or horseshoe arch almost universally in their erections in this country. But this is just one of those exceptions that prove the rule, and is one of the strongest arguments I can use to prove the prevalence of the pointed arch in the Byzantine period; for it shows, that when the Saracens entered a Roman province, where the pointed arch never had existed, they adopted the Roman form with the same facility as they had adopted the Pelægic one, and having no style or predilection of their own, used what they found and worked it eventually into those forms which suited their purposes, but retaining the local germ throughout all the variations to which they subjected it.

The universal prevalence of the pointed arch in Saracenic countries being so indubitable, I shall not detain you by dwelling longer on it here. There is, however, one other example to which I would wish to refer before leaving this part of the subject,—the celebrated mosque at the Kutub, at Delhi.

When the Patans conquered India, in the beginning of the thirteenth century, they brought with them their own style of architecture, and, as was then the custom, commenced erecting edifices to commemorate their triumphs. The example I am now referring to was commenced by Shems-ood-deen Altemash, about the year 1230, and was completed by him during the ten years of his reign. The principal arch, though of the pure equilateral Gothic form, and 22 feet span, and about 40 feet high, is erected with horizontal courses to nearly the summit, when courses of stones are placed on their ends, forming an Egyptian arch, exactly in the same manner as is done in the aqueduct at Tusculum, before quoted.

It is this peculiarity of construction that induces me to draw attention to it, as showing a persistence in a certain primeval mode of construction during more than 2,000 years, and long after the radiating or common form of arch was known and commonly used, and showing how we must extend our definition of an arch, if we would understand these eastern styles. For it would be evidently absurd to say that these Indian examples were not arches, because not constructed according to our principles; yet if we admit them we must admit the whole of the first series alluded to.

To return, however, from these eastern styles to those of the west. The first series I have to bring to notice is, as I said before, that found in the south of France, which for the nonce I shall call the Provençale style. It exists to the south of the Loire, to the north of the Garonne, and extends from the gulph of Nice to the shores of the Bay of Biscay, and its date extends from about the age of Charlemagne till about the middle or end of the eleventh century, when it was superseded by the round arch styles.

I shall perhaps startle most readers by such an assertion, as it has been singularly overlooked, or, at least, misunderstood hitherto; but the facts of the case appear to me to admit of no doubt, and that they would long ago have been received as well-established facts had it not been for the pre-conceived opinion that no pointed arch existed in Europe anterior to the twelfth century, and, in consequence, they have been ascribed to repairs or alterations, or, indeed, to anything but what they are, which is, integral parts of the original design of the edifices in which they are found.

One of the best known examples is that of the Cathedral of Avignon,—Notre Dame de Doms, as it is called. The porch and general details of the church are so nearly classical,